

THE *Tenth District* ECONOMIC DATABOOK

*A summary of regional and national economic indicators
for the Tenth District states*



DECEMBER 24, 2018

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

The unemployment rate was 3.3 percent across the Tenth District states in November, and total payroll employment grew 1.8 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest percentage gains in the mining and logging and leisure and hospitality sectors. Tenth District nominal personal income grew 4.1 percent in the third quarter of 2018 compared to the previous year. In the energy sector, rig counts were well above year-ago levels. The Federal Reserve Bank of Kansas City's Manufacturing Survey indicated an increase in manufacturing activity in December 2018, with a composite index of 51.7. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, decreased 1.6 percent in the third quarter of 2018 compared to the same period in 2017.

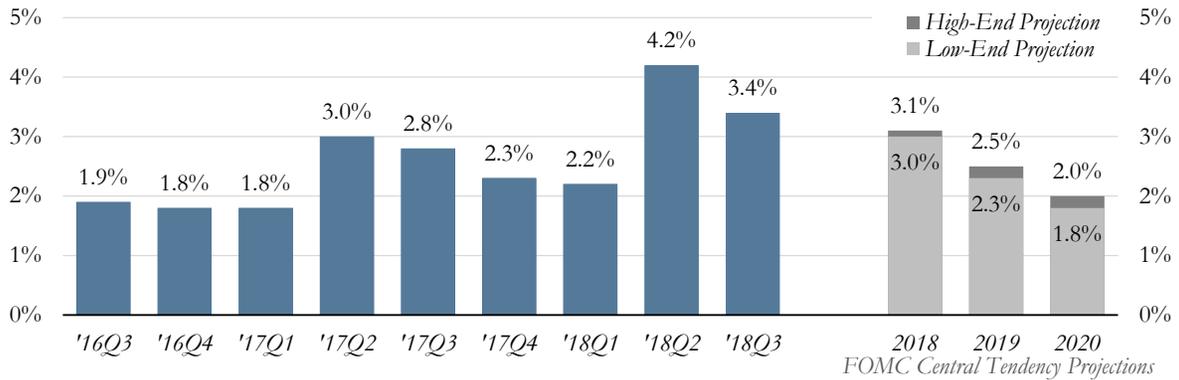
This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: gross domestic product (GDP); inflation; employment; employment by industry; state unemployment; personal income; home prices; housing indicators; manufacturing activity; oil, gas and coal production; agriculture; and exports. These indicators can be found on the following pages.



The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. There are three branches across the Tenth Federal Reserve District located in Denver, Oklahoma City, and Omaha.

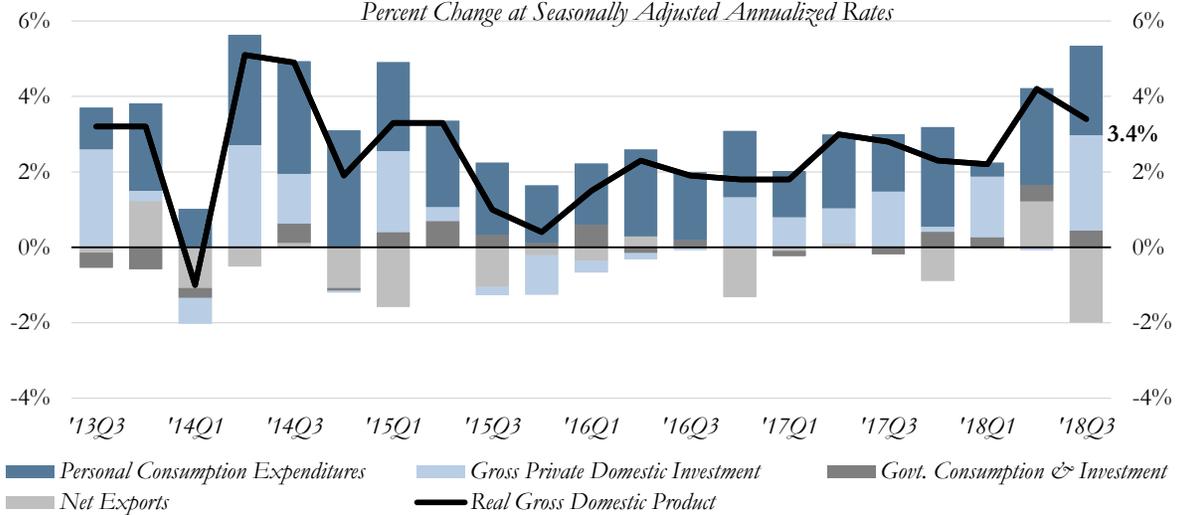
U.S. Real Gross Domestic Product

Percent Change at Seasonally Adjusted Annualized Rates



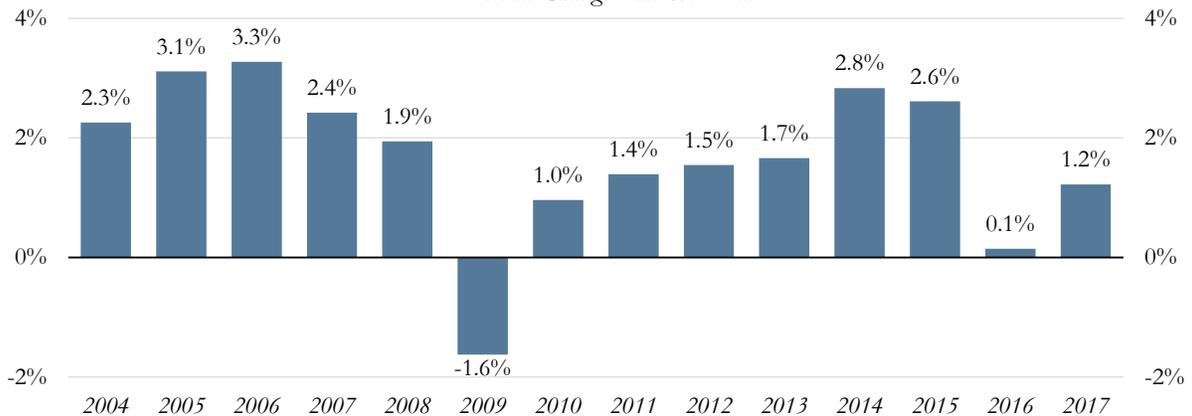
Contributions to Real U.S. GDP

Percent Change at Seasonally Adjusted Annualized Rates

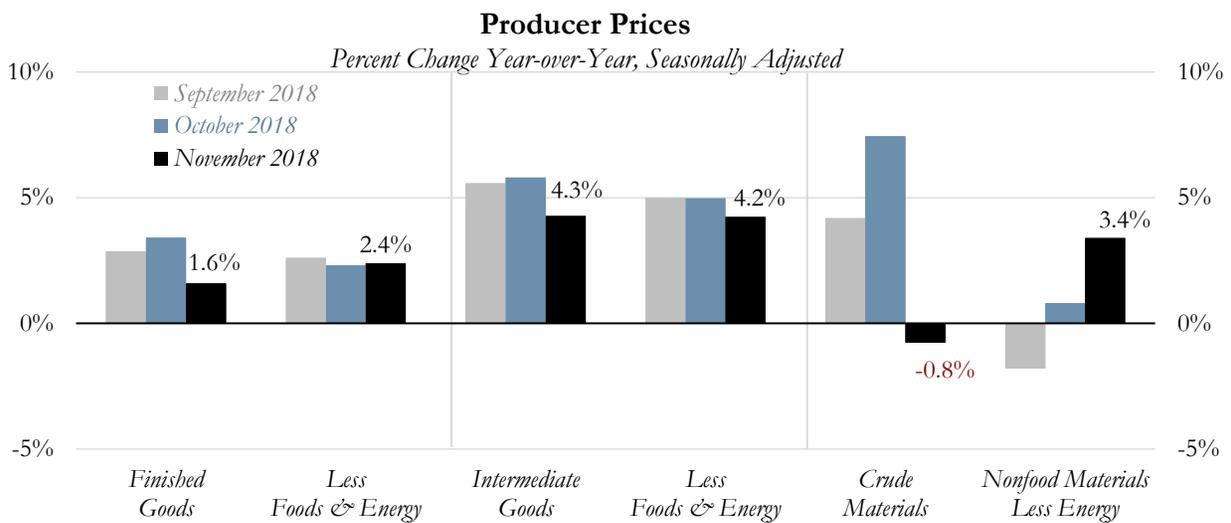
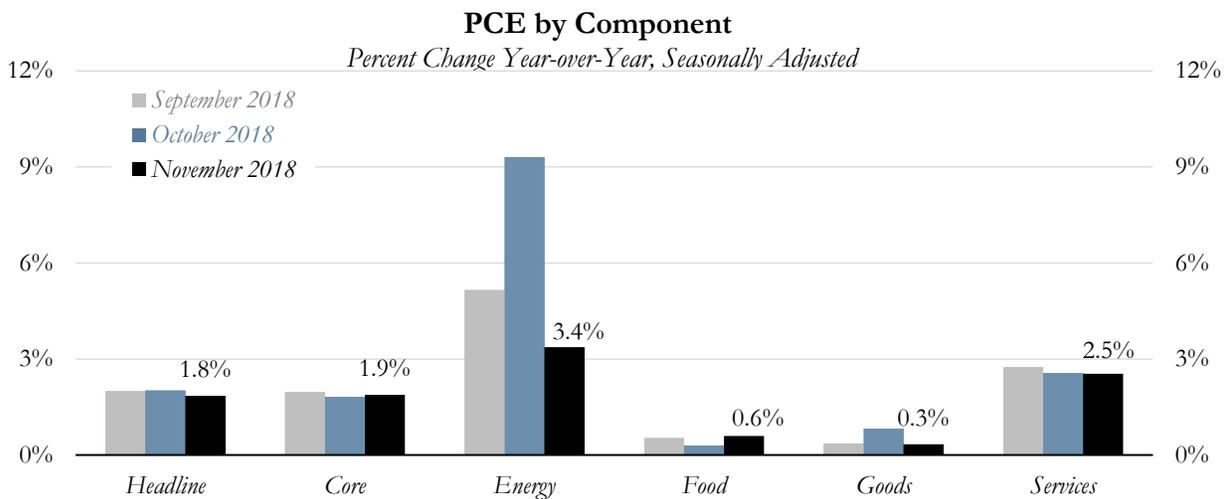
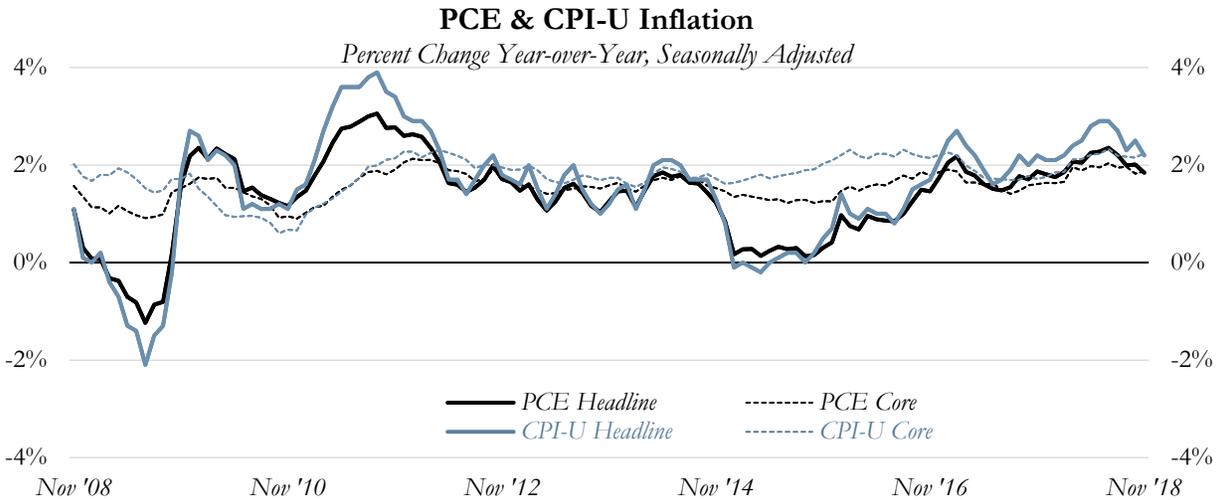


Tenth District Real Gross Domestic Product

Percent Change Year-over-Year



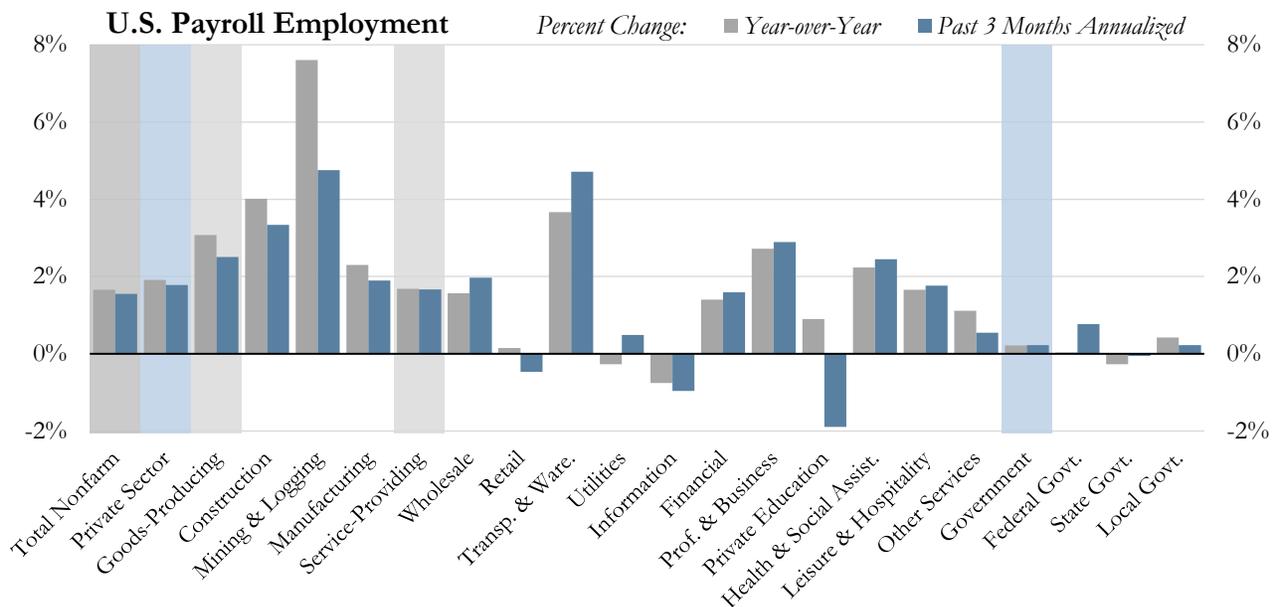
Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics



Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

November 2018 U.S. Payroll Employment

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
Total Nonfarm	149,893	2,443	100.0%
Private Sector	127,515	2,395	85.1%
<i>Goods-Producing</i>	20,869	623	13.9%
Construction	7,312	282	4.9%
Mining & Logging	750	53	0.5%
Manufacturing	12,807	288	8.5%
<i>Service-Providing</i>	106,694	1,765	71.1%
Wholesale Trade	6,026	93	4.0%
Retail Trade	15,911	24	10.6%
Transportation & Warehousing	5,419	192	3.6%
Utilities	553	-2	0.4%
Information	2,759	-21	1.8%
Financial Activities	8,622	119	5.8%
Professional & Business Services	21,207	561	14.1%
Educational Services	3,730	33	2.5%
Healthcare & Social Assistance	20,092	439	13.4%
Leisure & Hospitality	16,444	268	11.0%
Other Services	5,882	65	3.9%
Government	22,378	48	14.9%
Federal Government	2,804	1	1.9%
State Government	5,115	-14	3.4%
Local Government	14,459	61	9.7%

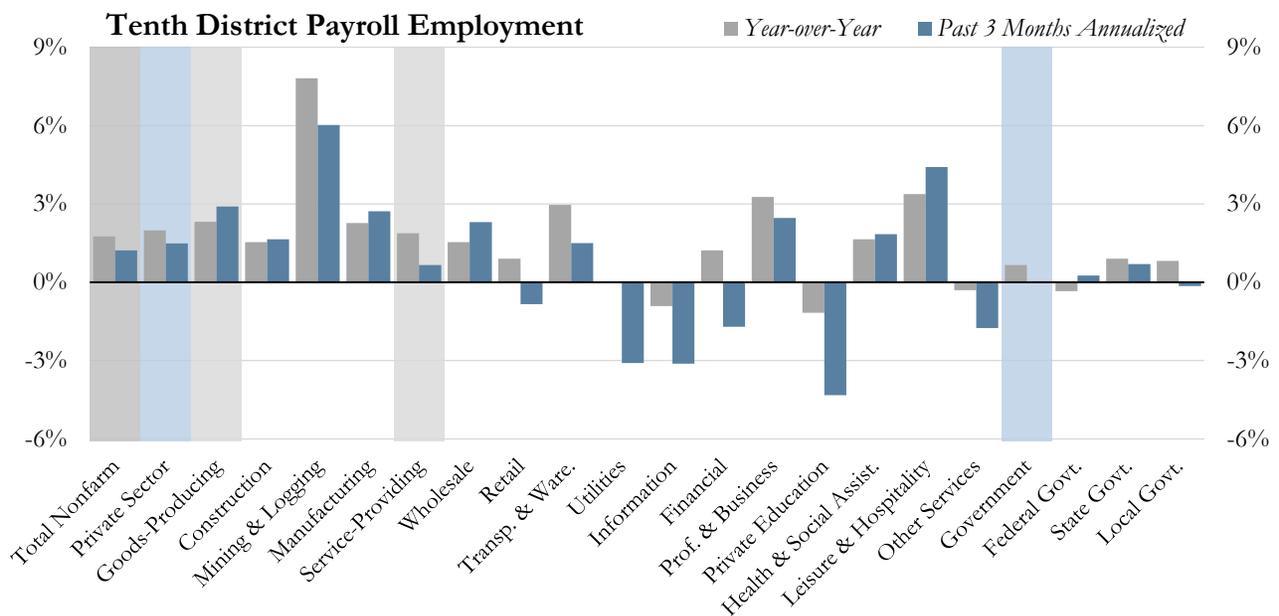


Source: Bureau of Labor Statistics/Haver Analytics

November 2018 Tenth District Payroll Employment

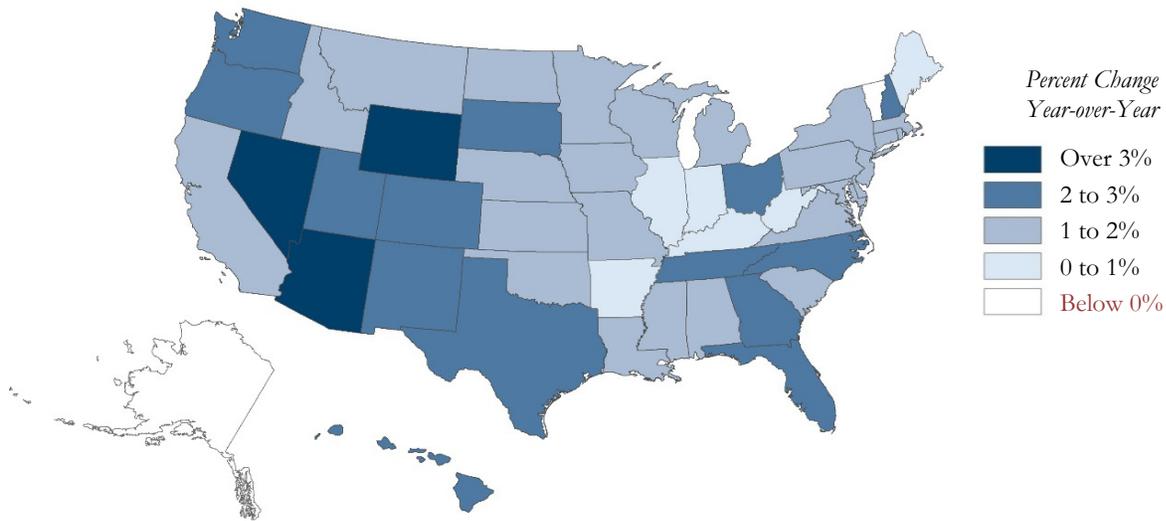
Seasonally Adjusted

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
Total Nonfarm	10,972	189	100.0%
Private Sector	9,050	176	82.5%
<i>Goods-Producing</i>	1,556	35	14.2%
Construction	553	8	5.1%
Mining & Logging	139	10	1.3%
Manufacturing	860	19	7.8%
<i>Service-Providing</i>	7,495	138	68.3%
Wholesale Trade	425	6	3.9%
Retail Trade	1,147	10	10.4%
Transportation & Warehousing	392	11	3.5%
Utilities	40	-0	0.4%
Information	194	-2	1.8%
Financial Activities	625	8	5.7%
Professional & Business Services	1,462	46	13.3%
Private Educational Services	151	-2	1.4%
Healthcare & Social Assistance	1,428	23	13.0%
Leisure & Hospitality	1,212	40	11.0%
Other Services	423	-1	3.9%
Government	1,922	13	17.5%
Federal Government	235	-1	2.2%
State Government	481	4	4.4%
Local Government	1,207	10	11.0%



Source: Bureau of Labor Statistics/Haver Analytics

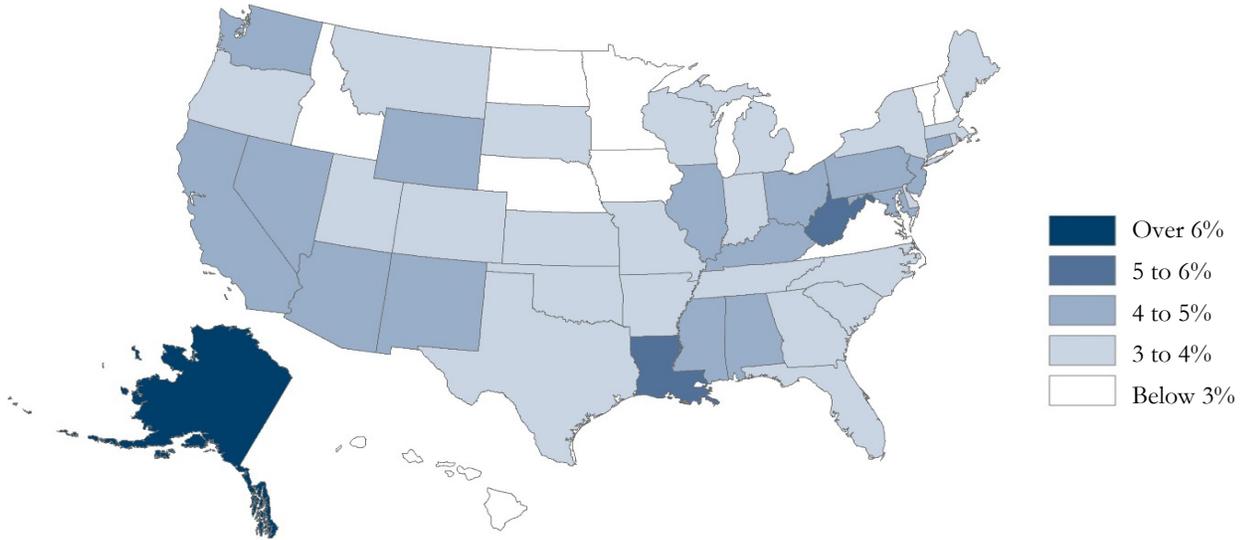
November 2018 Total Nonfarm Employment
Seasonally Adjusted



		<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>
United States		1.7%	25	Montana	1.6%
Tenth District		1.8	26	South Carolina	1.6
1	Nevada	3.8	27	Delaware	1.6
2	Arizona	3.6	28	Wisconsin	1.5
3	Wyoming	3.2	29	New Jersey	1.5
4	Texas	3.0	30	Kansas	1.4
5	Washington	2.9	31	Connecticut	1.4
6	Utah	2.9	32	Maryland	1.3
7	Florida	2.8	33	Pennsylvania	1.3
8	Colorado	2.6	34	Nebraska	1.3
9	Oregon	2.5	35	Mississippi	1.2
10	North Carolina	2.3	36	Minnesota	1.2
11	New Hampshire	2.2	37	New York	1.2
12	Georgia	2.2	38	Michigan	1.2
13	South Dakota	2.1	39	Louisiana	1.2
14	New Mexico	2.1	40	Missouri	1.1
15	Ohio	2.1	41	Rhode Island	1.0
16	Hawaii	2.0	42	Iowa	1.0
17	Tennessee	2.0	43	Arkansas	1.0
18	Virginia	1.9	44	Maine	1.0
19	Idaho	1.8	45	Indiana	1.0
20	California	1.8	46	Illinois	0.9
21	North Dakota	1.7	47	Kentucky	0.9
22	Alabama	1.7	48	West Virginia	0.9
23	Oklahoma	1.7	49	Alaska	-0.2
24	Massachusetts	1.7	50	Vermont	-0.4

Source: Bureau of Labor Statistics/Haver Analytics

November 2018 Unemployment Rates
Seasonally Adjusted



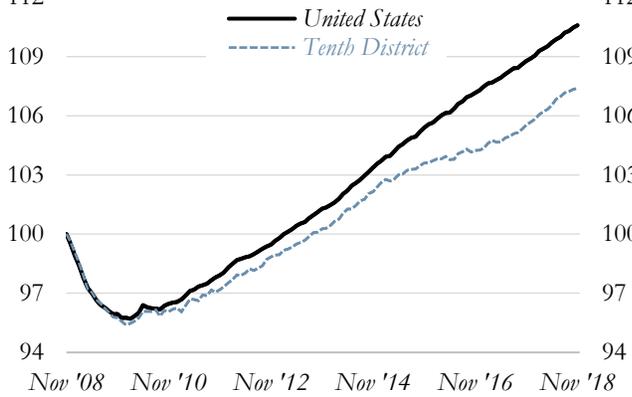
<i>Percent Unemployed</i>			<i>Percent Unemployed</i>		
United States 3.7%			24	Montana	3.7
Tenth District 3.3			26	Tennessee	3.6
1	Alaska	6.3	26	North Carolina	3.6
2	West Virginia	5.2	26	Arkansas	3.6
3	Louisiana	5.0	26	Indiana	3.6
4	Mississippi	4.7	30	Georgia	3.5
4	Arizona	4.7	31	Massachusetts	3.4
6	New Mexico	4.6	31	Maine	3.4
6	Ohio	4.6	33	Oklahoma	3.3
8	Kentucky	4.5	33	Florida	3.3
9	Nevada	4.4	33	South Carolina	3.3
10	Washington	4.3	33	Colorado	3.3
11	Illinois	4.2	37	Kansas	3.2
11	Pennsylvania	4.2	37	Utah	3.2
13	Connecticut	4.1	39	Missouri	3.0
13	California	4.1	39	South Dakota	3.0
13	Wyoming	4.1	39	Wisconsin	3.0
16	Maryland	4.0	42	Virginia	2.8
16	New Jersey	4.0	42	Minnesota	2.8
16	Alabama	4.0	42	Nebraska	2.8
19	New York	3.9	42	North Dakota	2.8
19	Michigan	3.9	46	Vermont	2.7
19	Oregon	3.9	47	Idaho	2.6
22	Delaware	3.8	48	New Hampshire	2.5
22	Rhode Island	3.8	49	Iowa	2.4
24	Texas	3.7	49	Hawaii	2.4

Source: Bureau of Labor Statistics/Haver Analytics

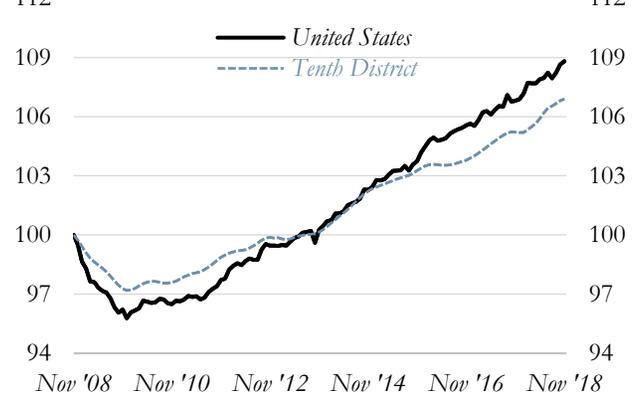
Total Nonfarm Employment

Ten-Year Index of Growth, Seasonally Adjusted

Payroll Survey



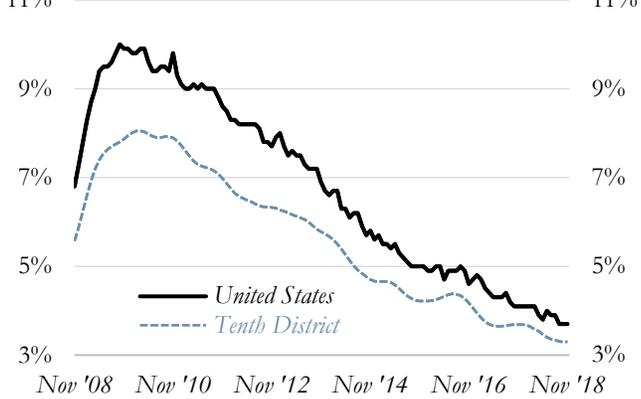
Household Survey



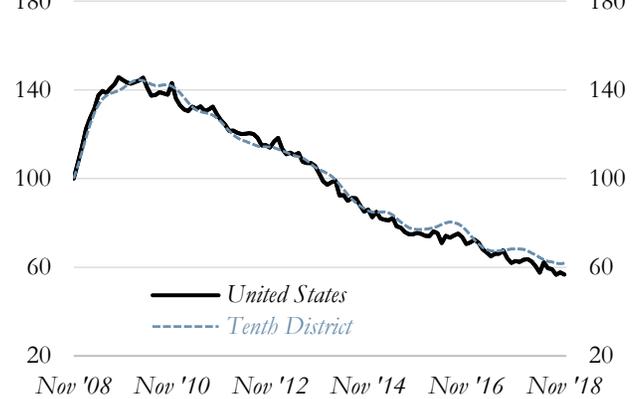
Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted

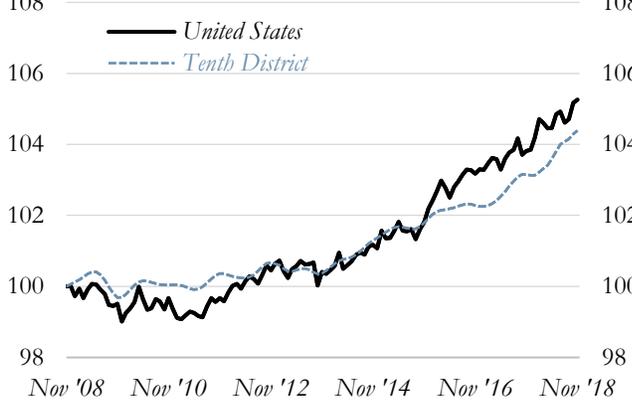
Unemployment Rate



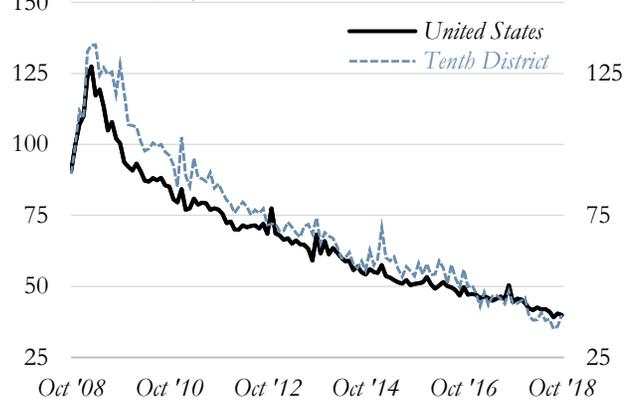
Unemployed



Labor Force



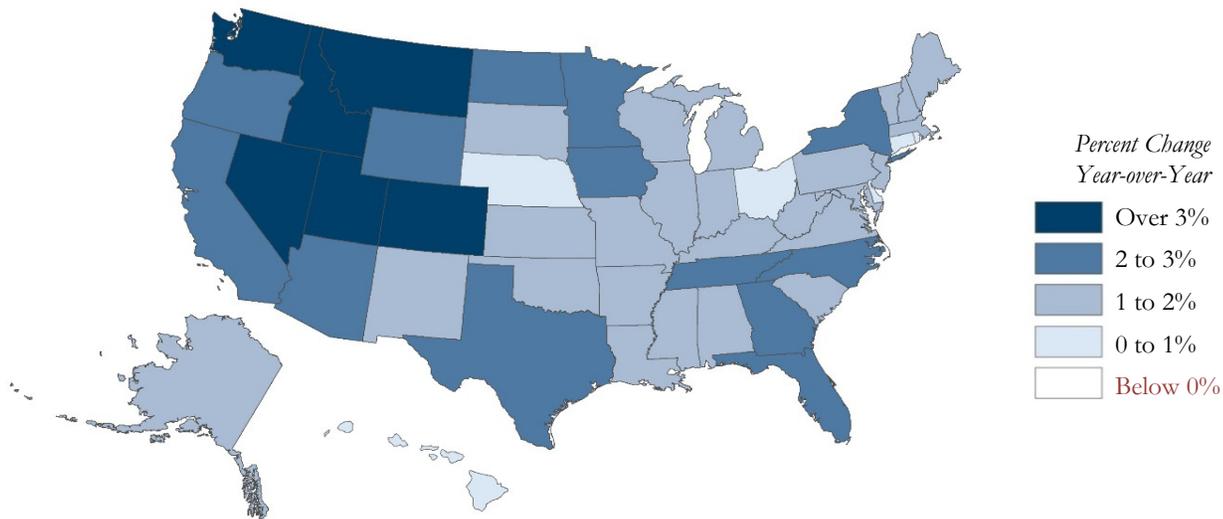
Unemployment Insurance Claims



Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

2018Q3 Real Personal Income

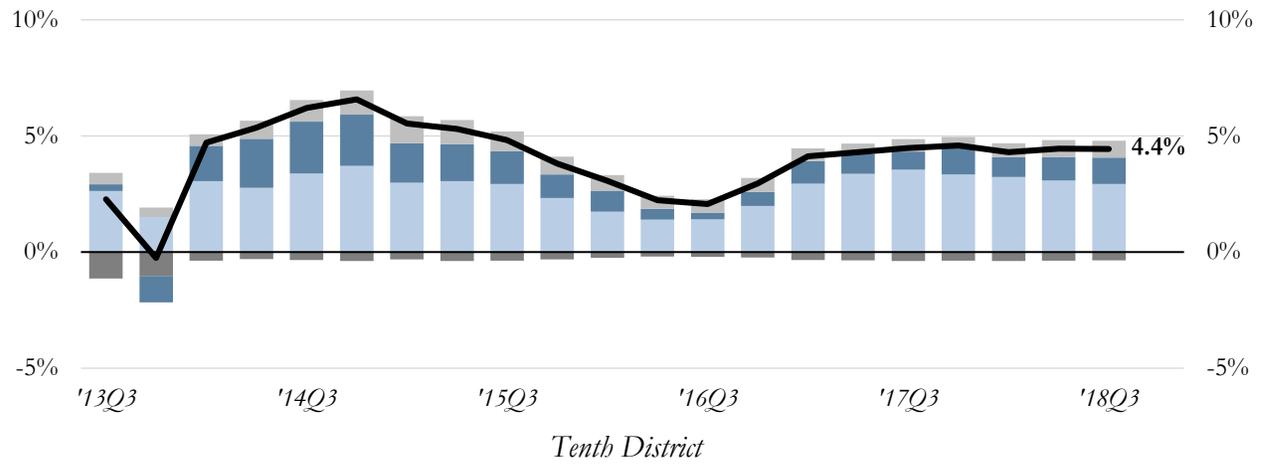
Seasonally Adjusted



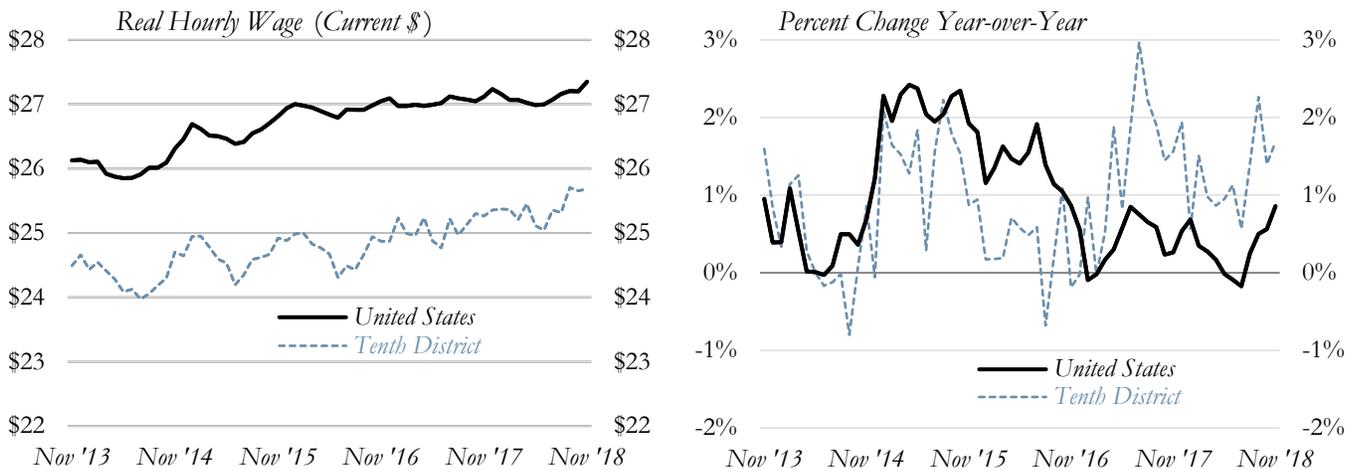
	<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		
United States	2.2%	\$53,683	25	South Carolina	1.7%	\$42,726	
Tenth District	1.9	45,980	26	Oklahoma	1.5	46,178	
1	Washington	4.8	61,085	27	Louisiana	1.5	45,449
2	Utah	3.9	45,457	28	Michigan	1.4	47,810
3	Nevada	3.3	48,006	29	Alaska	1.4	59,647
4	Colorado	3.3	57,079	30	Virginia	1.4	56,950
5	Idaho	3.2	43,155	31	Maine	1.4	48,198
6	Montana	3.1	47,196	32	West Virginia	1.4	40,389
7	Oregon	2.9	49,948	33	New Mexico	1.3	41,313
8	Texas	2.9	49,245	34	Pennsylvania	1.3	55,412
9	California	2.9	62,572	35	New Jersey	1.3	66,956
10	North Dakota	2.8	54,735	36	Maryland	1.3	62,860
11	New York	2.7	67,859	37	Wisconsin	1.3	50,753
12	North Carolina	2.6	45,909	38	Indiana	1.2	46,589
13	Florida	2.5	49,258	39	Kentucky	1.2	41,889
14	Arizona	2.5	43,847	40	Mississippi	1.2	37,990
15	Minnesota	2.5	56,280	41	South Dakota	1.1	49,980
16	Wyoming	2.2	60,553	42	New Hampshire	1.1	61,856
17	Tennessee	2.1	47,134	43	Vermont	1.1	54,110
18	Iowa	2.1	48,743	44	Kansas	1.0	50,121
19	Georgia	2.0	45,624	45	Ohio	0.9	48,230
20	Illinois	1.9	56,850	46	Delaware	0.8	51,069
21	Massachusetts	1.9	70,410	47	Nebraska	0.8	52,000
22	Alabama	1.7	42,380	48	Rhode Island	0.8	54,736
23	Arkansas	1.7	42,373	49	Connecticut	0.5	74,076
24	Missouri	1.7	46,703	50	Hawaii	0.4	54,411

Source: Bureau of Economic Analysis/Haver Analytics

Nominal Personal Income
Contributions to Percent Change, Seasonally Adjusted
 United States

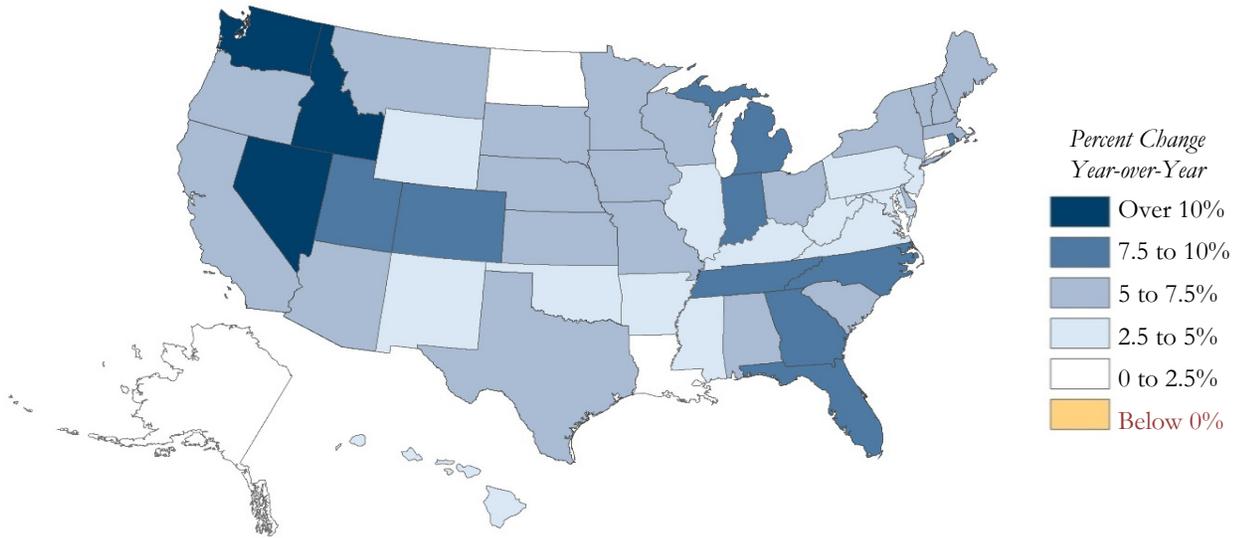


Real Average Hourly Wage
Seasonally Adjusted



Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

2018Q3 FHFA Purchase-Only Home Price Index
Seasonally Adjusted



*Percent Change
Year-over-Year*

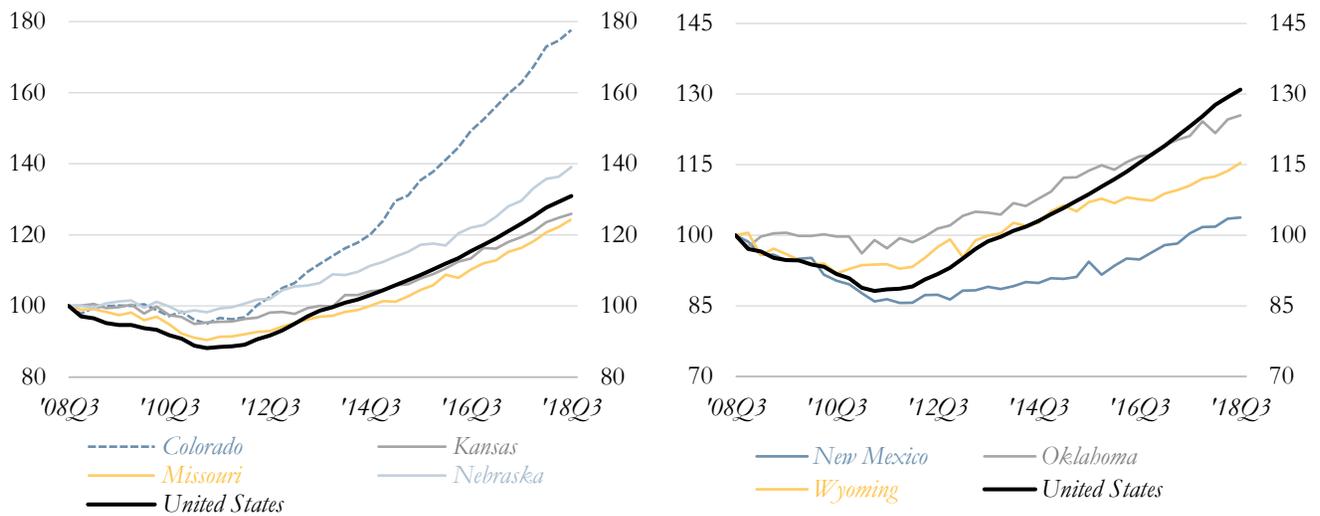
*Percent Change
Year-over-Year*

United States			6.3%		
1	Idaho	15.1	25	Delaware	6.2%
2	Nevada	15.0	26	New York	5.9
3	Washington	10.6	27	Texas	5.7
4	Utah	10.0	28	Montana	5.6
5	Colorado	9.2	29	Kansas	5.5
6	Florida	8.9	30	Vermont	5.5
7	Rhode Island	8.6	31	Massachusetts	5.3
8	Georgia	8.4	32	Maine	5.2
9	Indiana	7.9	33	Iowa	5.0
10	North Carolina	7.7	34	Arkansas	4.5
11	Michigan	7.6	35	Kentucky	4.5
12	Tennessee	7.5	36	Virginia	4.4
13	Nebraska	7.4	37	Pennsylvania	4.4
14	Oregon	7.3	38	Wyoming	4.4
15	South Carolina	7.3	39	New Jersey	3.9
16	Arizona	7.1	40	Oklahoma	3.6
17	South Dakota	6.9	41	Illinois	3.5
18	Missouri	6.9	42	West Virginia	3.4
19	Wisconsin	6.9	43	New Mexico	3.4
20	Minnesota	6.8	44	Hawaii	3.0
21	Ohio	6.5	45	Maryland	2.8
22	California	6.5	46	Mississippi	2.7
23	Alabama	6.4	47	Connecticut	2.2
24	New Hampshire	6.2	48	Louisiana	1.5
			49	North Dakota	1.0
			50	Alaska	0.1

Source: Federal Housing Finance Agency (FHFA)/Haver Analytics

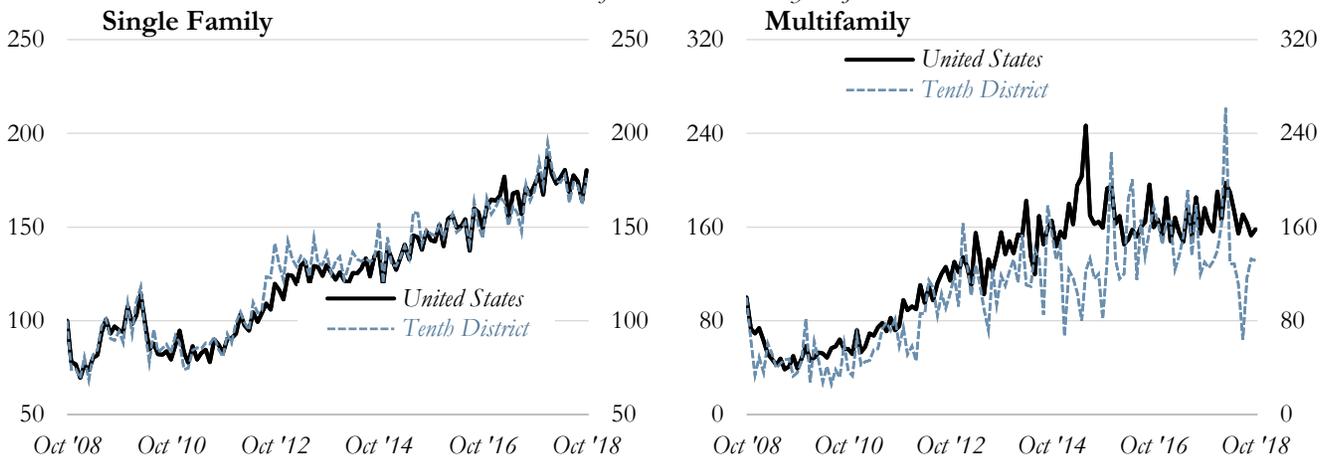
FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted

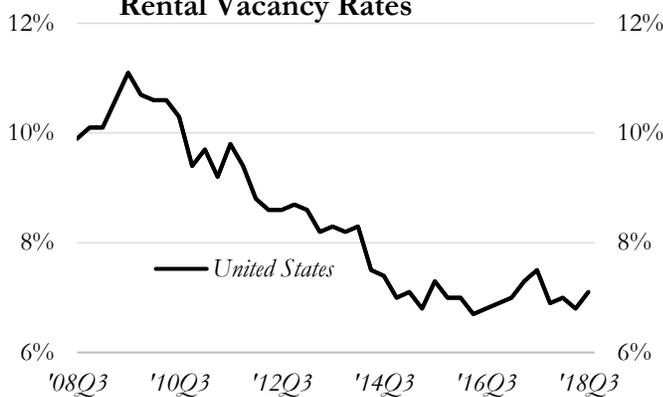


Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted



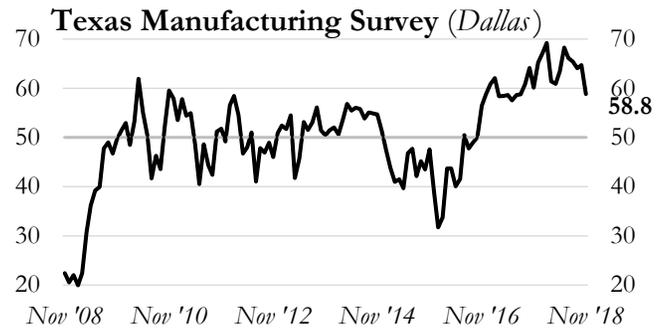
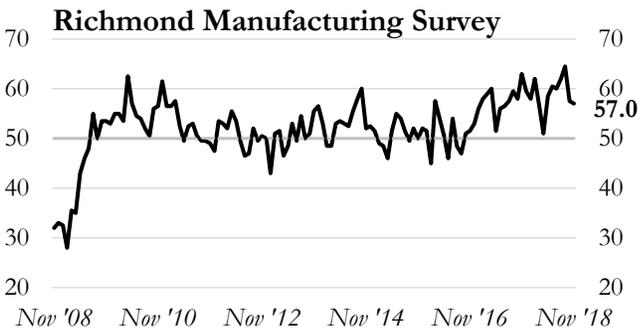
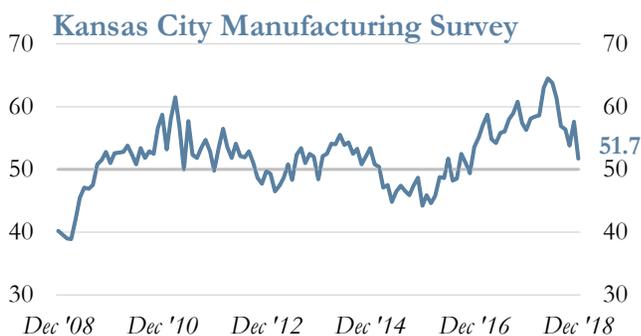
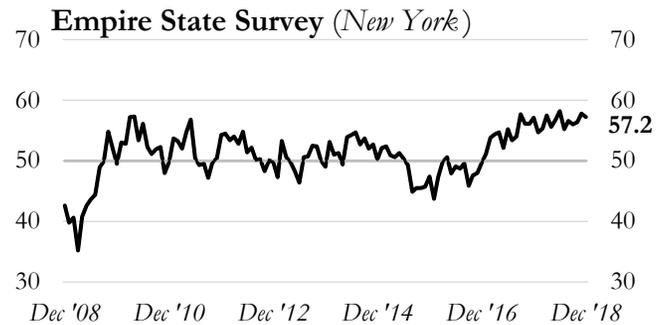
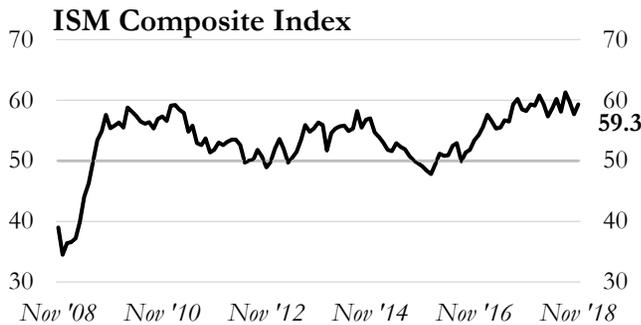
Rental Vacancy Rates



Note: Rental Vacancy Rates are not available for the Tenth District.

Source: Federal Housing Finance Agency (FHFA) & Census Bureau/Haver Analytics

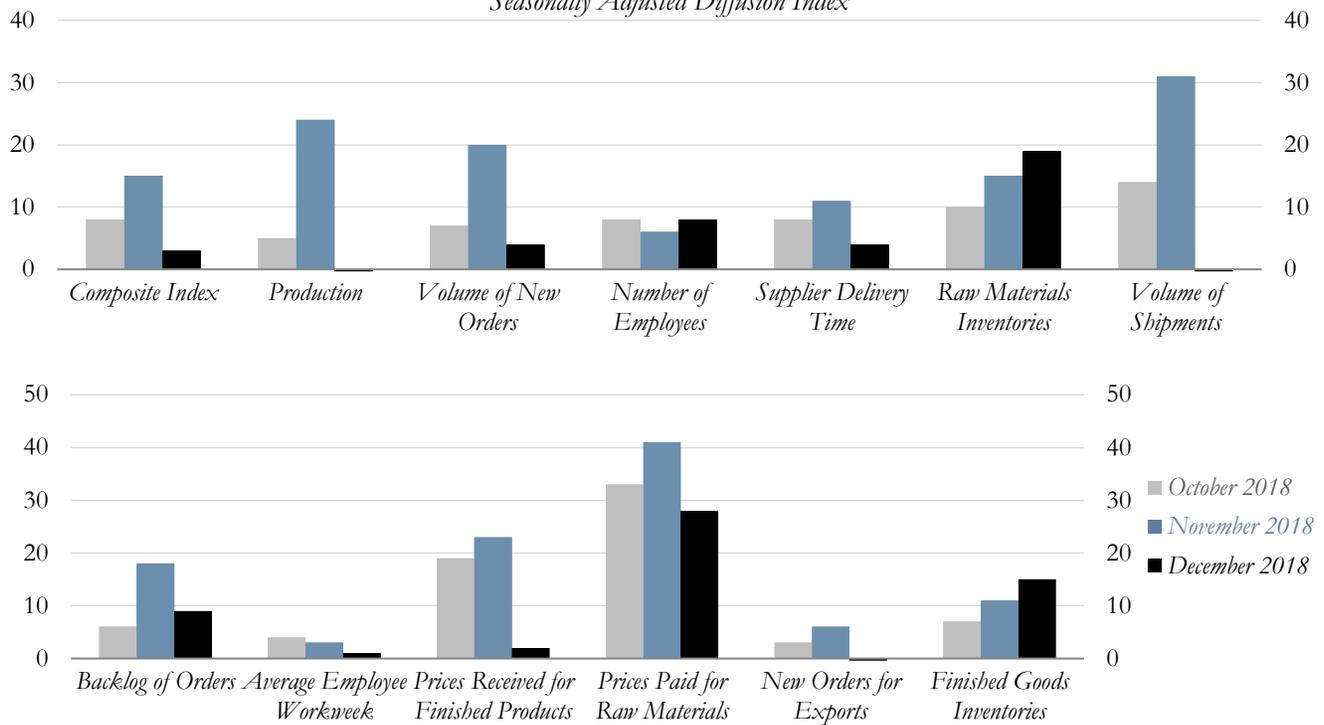
Manufacturing Surveys
Seasonally Adjusted



Note: Indices are defined to be between 0 and 100; above 50 indicates growth and below 50 indicates contraction.
Source: Institute for Supply Management (ISM) & Federal Reserve District Banks/Haver Analytics

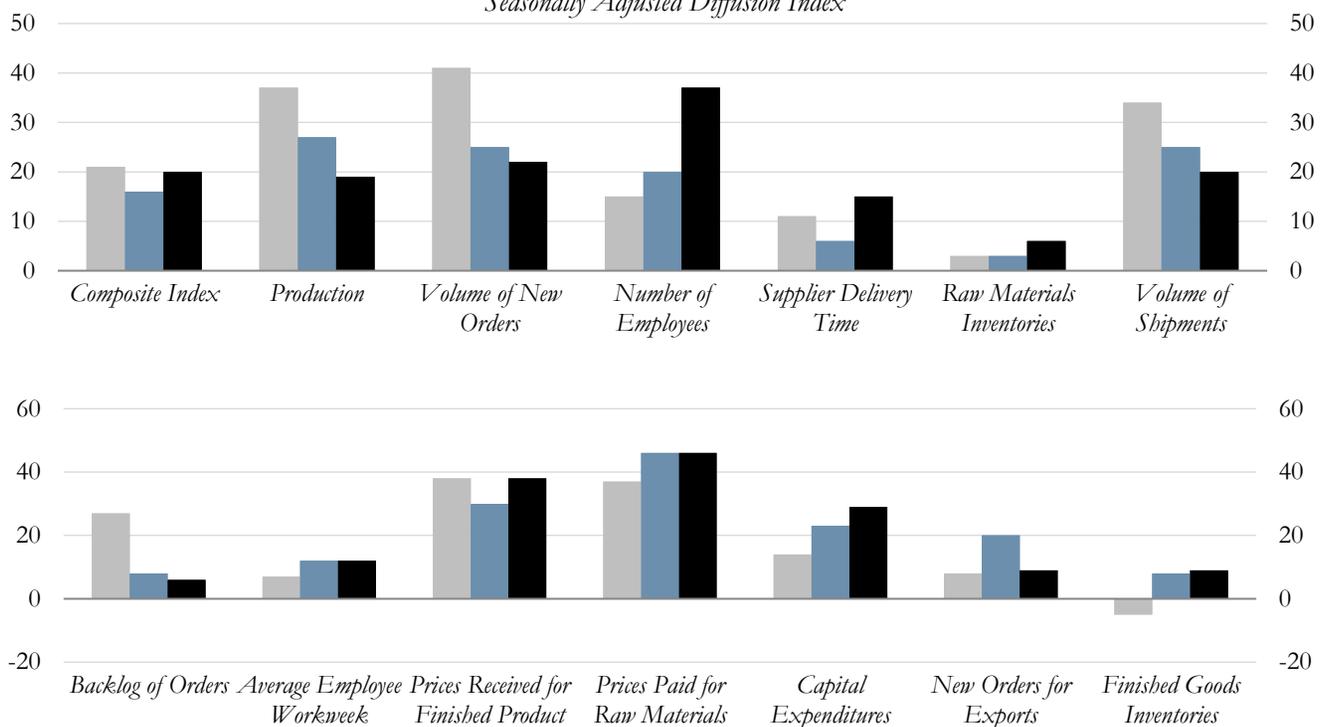
Current Activity vs. a Month Ago

Seasonally Adjusted Diffusion Index



Expectations Six-Months Ahead

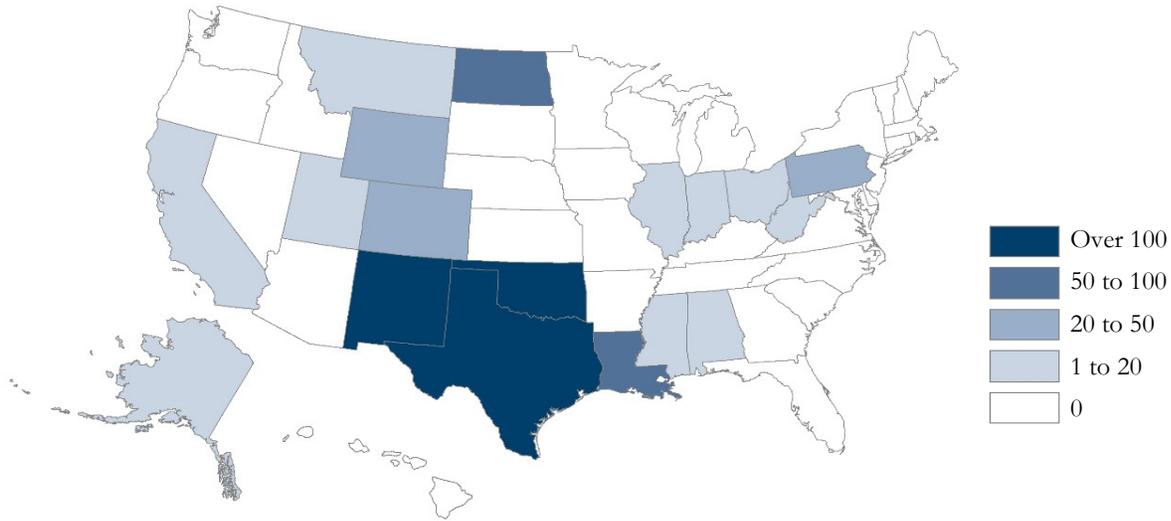
Seasonally Adjusted Diffusion Index



Note: Indices above zero indicate expansion.

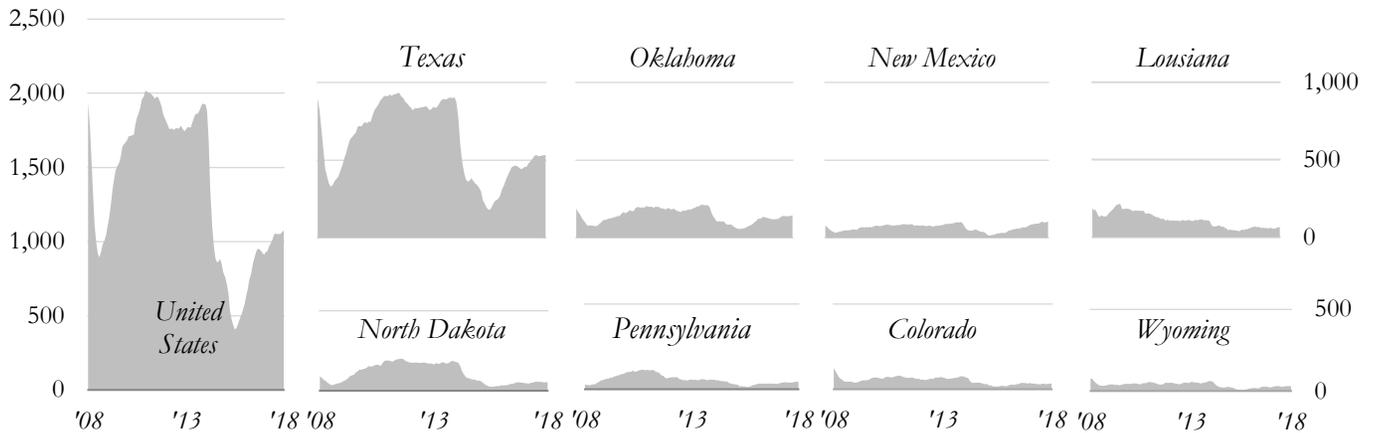
Source: Federal Reserve Bank of Kansas City/Haver Analytics

November 2018 Active Oil & Gas Drilling Rig Counts



	<i>Average Rig Counts During the Month</i>	<i>Percent Change Year-over-Year</i>	<i>Current Share of Activity</i>
United States	1,077	15.8%	
Tenth District	314	26.1	29.2%
<i>Top Producing States</i>			
Texas	533	19.5	49.5
Oklahoma	145	19.8	13.5
New Mexico	106	55.9	9.8
Louisiana	65	8.3	6.0
North Dakota	54	14.9	5.0
Pennsylvania	45	45.2	4.2
Colorado	33	-10.8	3.1
Wyoming	30	30.4	2.8
Ohio	17	-43.3	1.6
California	15	7.1	1.4

Ten-Year History of Most Active States
Average Active Monthly Drilling Rig Counts

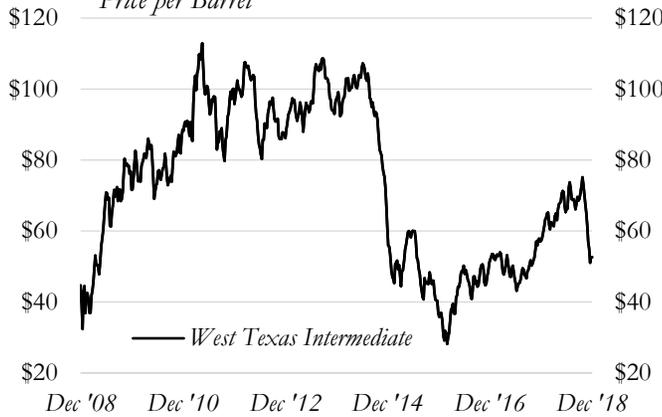


Source: Baker Hughes/Haver Analytics

Spot Prices

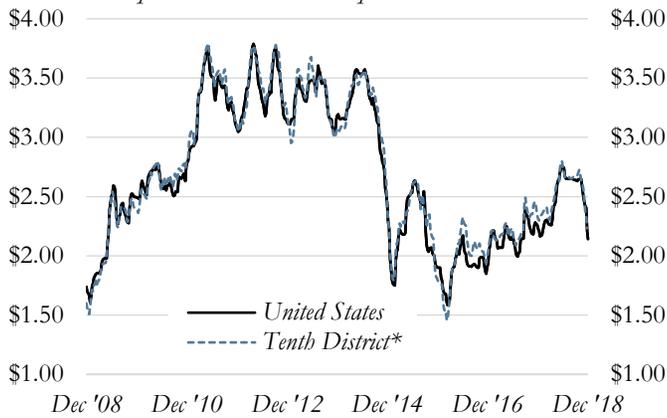
Crude Oil

Price per Barrel



Gasoline

Price per Gallon at the Pump



Natural Gas

Price per Thousand Cubic Feet

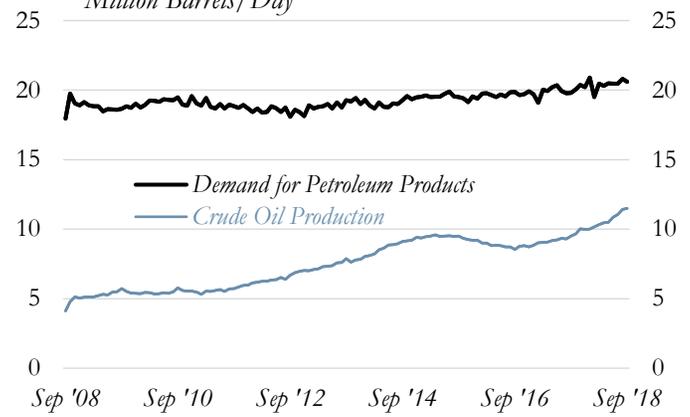


U.S. Supply/Demand Dynamics

Seasonally Adjusted

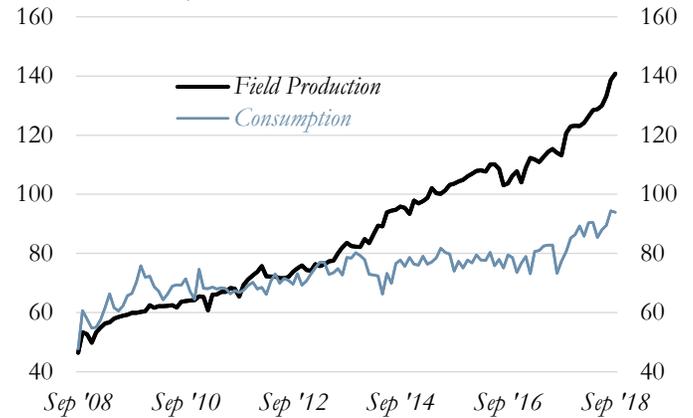
Crude Oil

Million Barrels/Day



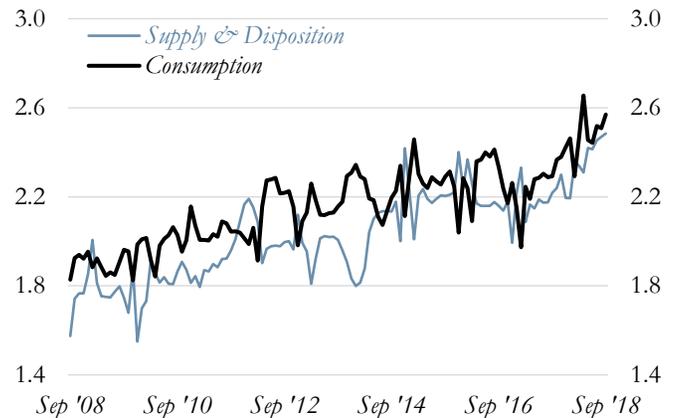
Natural Gas Liquids

Million Barrels/Month



Natural Gas

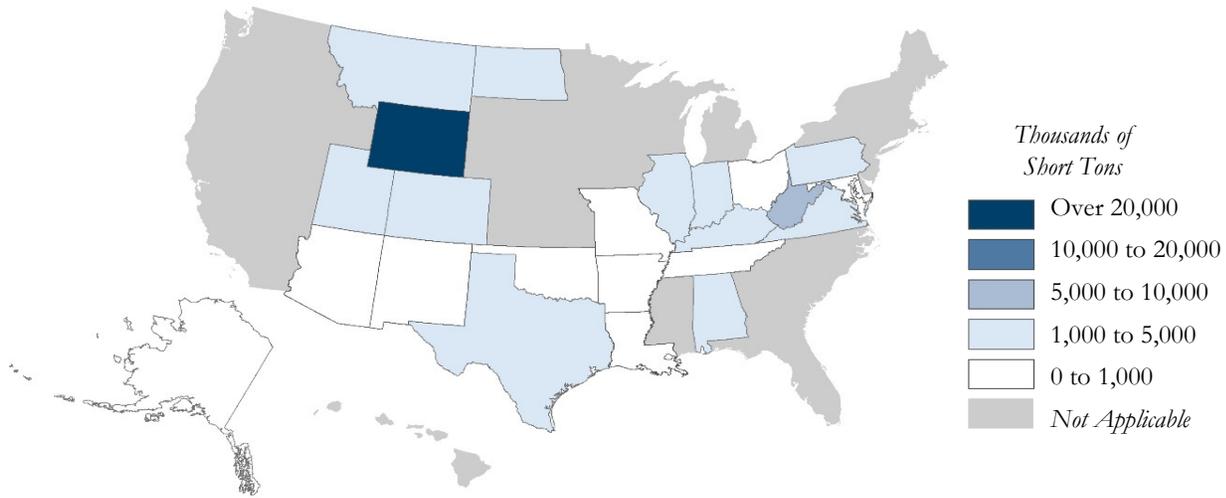
Trillion Cubic Feet/Month



*Average price per gallon for major Tenth District metro areas.

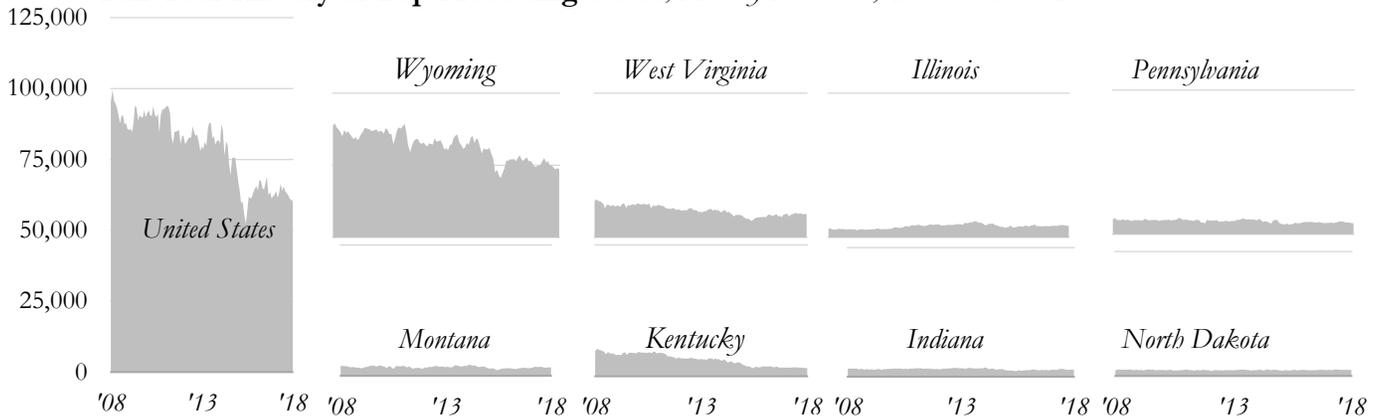
Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

November 2018 Coal Production
Seasonally Adjusted



	<i>Monthly Production (Thousand Short Tons)</i>	<i>Percent Change Year-over-Year</i>	<i>Current Share of Production</i>
United States	60,292.6	-3.5%	
Tenth District*	25,475.5	-4.8	42.3%
<i>Top Producing States</i>			
Wyoming	23,711.1	-3.5	39.3
West Virginia	8,076.0	0.2	13.4
Illinois	3,987.2	1.2	6.6
Pennsylvania	3,846.4	-3.4	6.4
Montana	3,211.0	7.5	5.3
Kentucky	3,074.9	-6.8	5.1
Indiana	2,815.7	6.9	4.7
North Dakota	2,450.9	0.9	4.1
Texas	2,322.7	-23.5	3.9
Alabama	1,243.8	12.9	2.1

Ten-Year History of Top Producing States, Monthly Production, Thousand Short Tons



*Includes all Tenth District states but Nebraska.

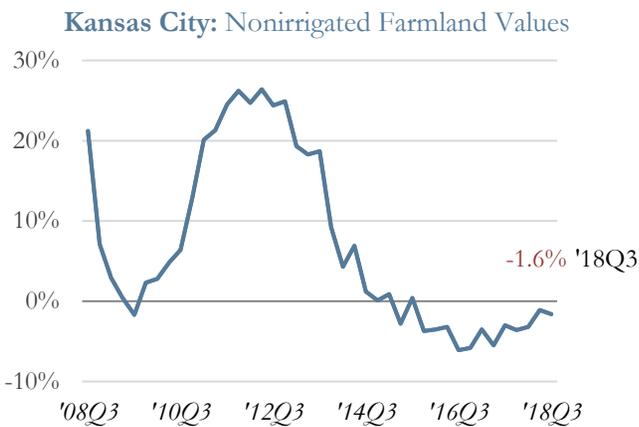
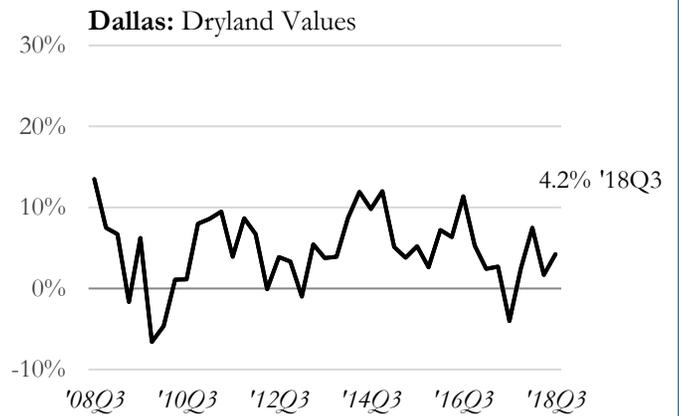
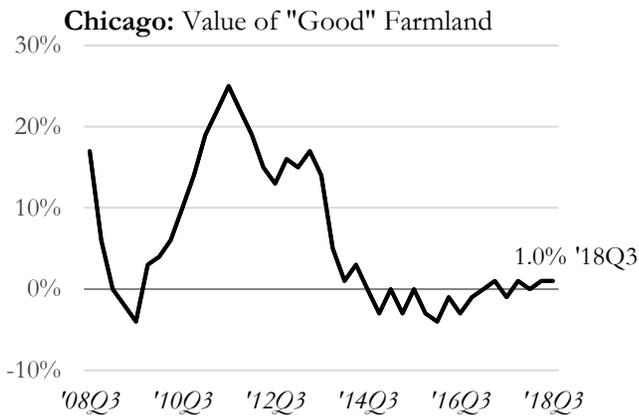
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

Farm Land Values*



Farmland Values by Federal Reserve District

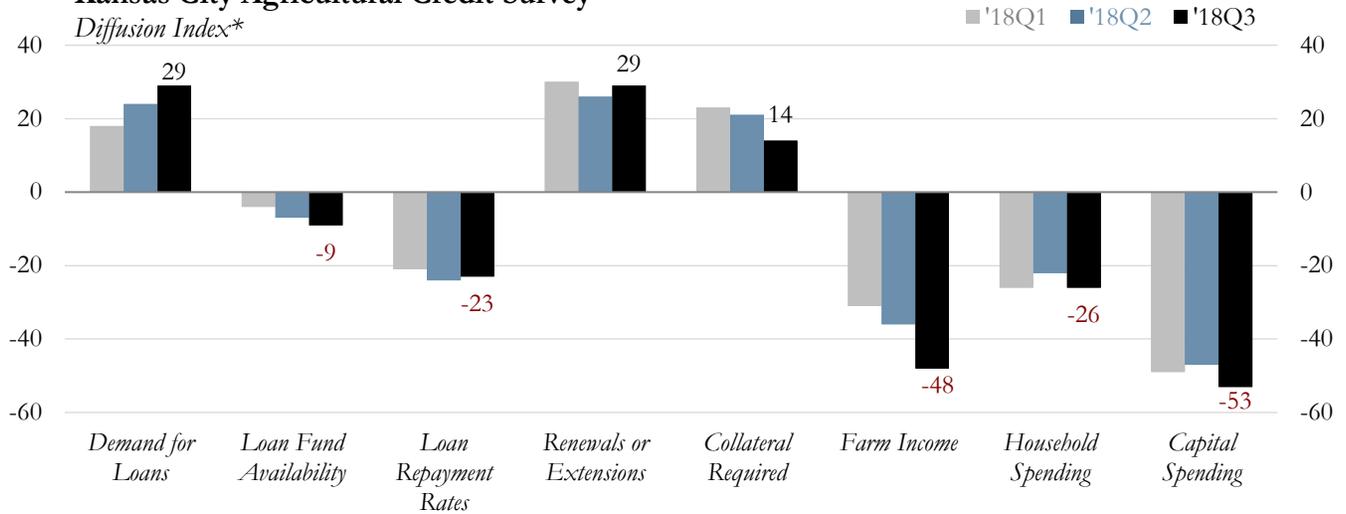
Percent Change Year-over-Year



*Values shown for the most recent survey available for each district.
 Source: Federal Reserve District Banks/Haver Analytics

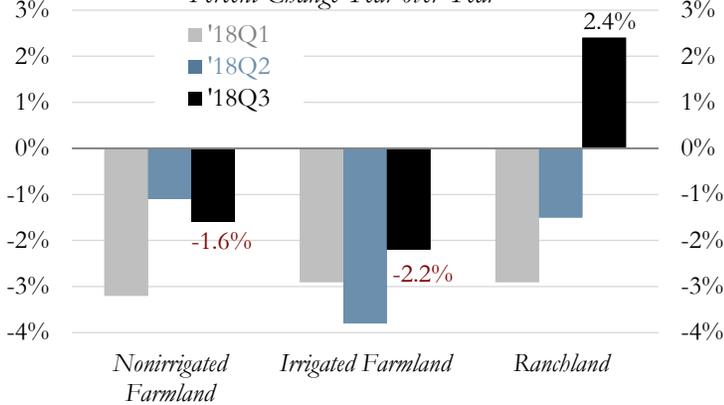
Kansas City Agricultural Credit Survey

*Diffusion Index**

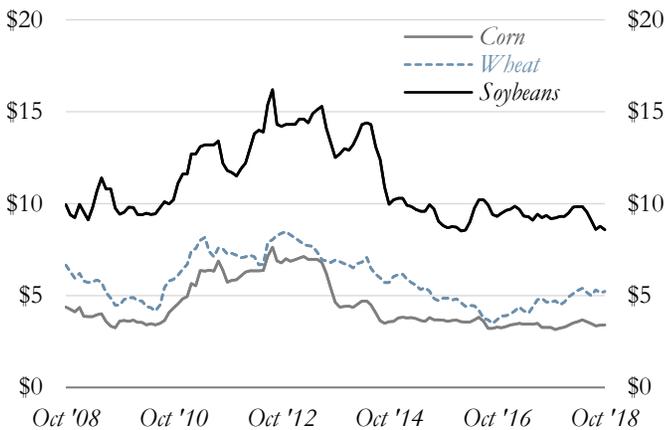


Tenth District Farmland Values

Percent Change Year-over-Year

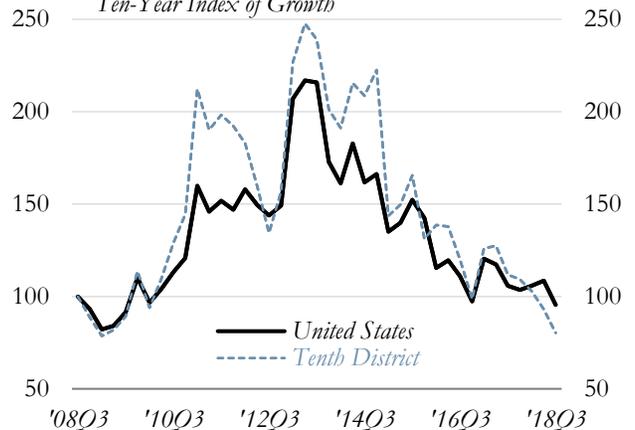


Spot Prices



Farm Income

Ten-Year Index of Growth

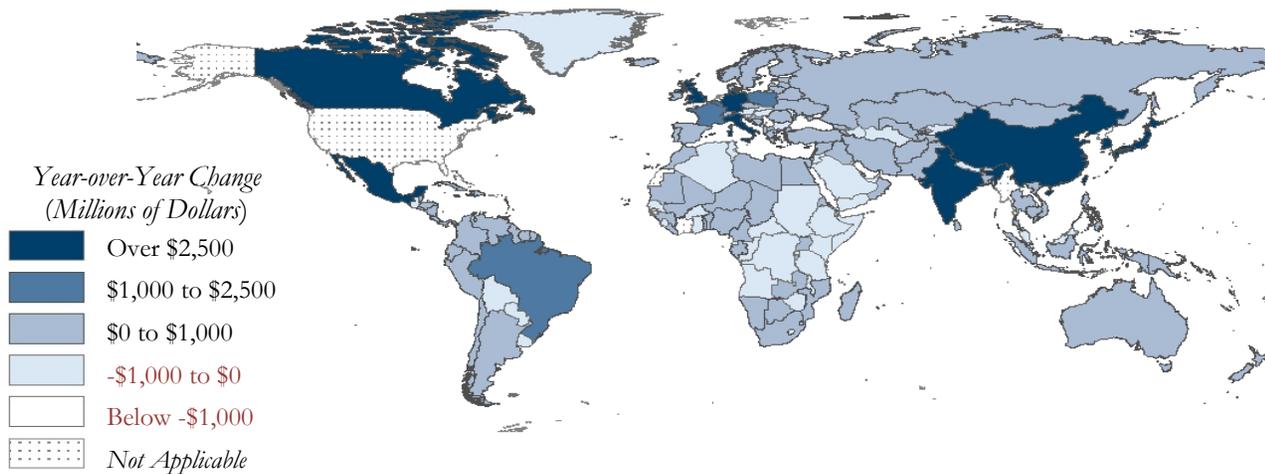


*Calculated as the percentage of total respondents reporting increases less those reporting declines.

Source: Wall Street Journal, Bureau of Economic Analysis & Federal Reserve Bank of Kansas City/Haver Analytics

2018Q3 U.S. Exports

Year-to-Date



		<i>Exports Year-to-Date (Billions of Dollars)</i>	<i>Percent Change Year-to-Date</i>	<i>Share of Exports Year-to-Date</i>
	United States	\$1,242.2	9.1%	
<i>Top Export Markets</i>	Canada	225.4	7.3	18.1%
	Mexico	197.9	10.2	15.9%
	China*	144.2	2.8	11.6%
	Japan	54.8	9.9	4.4%
	United Kingdom	49.3	18.4	4.0%
	Germany	43.5	10.3	3.5%
	South Korea	41.0	13.8	3.3%
	Netherlands Antilles	36.2	15.0	2.9%
	Brazil	29.3	9.0	2.4%
	France	26.9	8.1	2.2%

Ten-Year History of U.S. Top Export Countries

Billions in Quarterly Exports



Source: Census Bureau/Haver Analytics

*Includes China, Hong Kong, Taiwan & Macao.

Page 2: Gross domestic product (GDP) is the most commonly used measure of aggregate U.S. economic activity. Real GDP is indexed for inflation to 2009 dollars using the personal consumption expenditure price index (PCEPI). Advance, second, and third GDP estimates are released during the first, second, and third month of the following quarter. Each release reflects more complete information. Federal Open Market Committee (FOMC) projections for GDP are released quarterly. Contributions to GDP show how each component of GDP contributes to GDP growth. Tenth District GDP is the year-over-year percent change for the sum of the Gross State Products from CO, KS, MO, NE, NM, OK and WY.

Page 3: Inflation is calculated as the year-over-year change in price indices. Headline inflation includes all price components, while core inflation excludes the more volatile components of food and energy. Producer prices reflect price changes in production components, while PCEPI and CPI-U (consumer price index for all urban consumers) estimates show changes in commodities sold to consumers.

Pages 4, 5 and 6: Nonfarm employment data from the Bureau of Labor Statistics Current Employment Survey are commonly called "Payroll" employment data. Estimates from this survey are revised throughout the year and a major revision or "benchmark" of the data occurs in March of each year.

Page 7: The "official" and most commonly reported unemployment rate is calculated as the number of unemployed workers divided by the total civilian labor force. These data are reported from the Bureau of Labor Statistics Current Population Survey, commonly called the "Household" survey.

Page 8: "Payroll" and "Household" surveys are released monthly, providing the most current estimates of employment published by the Bureau of Labor Statistics. Because methodologies differ between surveys, employment estimates also differ. For more information, visit: http://www.bls.gov/web/empsit/ces_cps_trends.pdf Initial claims show monthly applications for initial claims for state unemployment insurance benefits.

Pages 9 and 10: Personal income provides a measure of all income received by residents of a given geographic area. Data shown on page 9 are in real terms (adjusted for inflation) and data on page 10 are shown in nominal terms (not adjusted for inflation). Transfer payments include social benefits such as unemployment insurance, Social Security, and Medicaid. Contributions to social insurance are subtracted from personal income. These contributions include taxes paid by businesses and employees that support social insurance programs such as unemployment insurance, Social Security, and Medicaid. The residence adjustment adds income received outside of a recipients state of residence and makes a corresponding subtraction from the area where this income was earned or received. Real average hourly wages are calculated as total earnings divided by total employment for a given geographic area. Data are adjusted for inflation using the CPI-U and are indexed to the most current month of data.

Pages 11 and 12: Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties.

Page 12: Monthly single and multifamily housing permits data are not revised and therefore may not sum to published year-end totals.

Page 13: The ISM composite index, also commonly called the Purchasing Managers Index (PMI), represents a weighted average of diffusion indices for new orders, production, supplier deliveries, inventories, and employment. Federal Reserve district surveys differ slightly in methodologies for composite indices.

Page 14: Kansas City Manufacturing Survey diffusion indices are calculated as the percentage of total respondents reporting increases in activity less those reporting declines.

Page 15: The active rig count is the number of rigs actively exploring for or developing oil or natural gas. Rig counts provide an indicator of new drilling activity and potential for expanded crude oil or natural gas production.

Page 16: A spot price is the current market delivery price of a given commodity.

Page 17: Coal production is shown as production during a given month.

Pages 18 and 19: Farmland values surveyed differ across Federal Reserve districts.

Page 20: Exports measure the total physical movement of a given product from the United States to a foreign country.

Data Revisions

Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

Seasonal Adjustments

Most data are seasonally adjusted to remove variance caused by seasonal fluctuations in economic activity. Data in this report show the seasonal adjustments of data publishers where available. In other cases, Census X-12 adjustments were applied.

Additional Resources Available

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